DOCKET NO. 133226 SAR 62A

Serial No. 10/799,515

Response to Official Action of Nov. 16, 2006

LISTING OF CLAIMS

PATENT

1. (Currently Amended) An ionically crosslinked resin composition in the form of an adhesive

or sealant which exhibits reversible crosslinking behavior prepared by copolymerizing in the

absence of radiation conditions an alpha, beta ethylenically unsaturated monomer with an oil

soluble metal salt prepared by reacting (A) a metal compound with (B) an acid functional

compound which is a reaction product of (1) an alpha-beta ethylenically unsaturated hydroxy

compound and (2) a carboxylic polyacid, anhydride, sulfur oxide, or phosphorus oxide.

2. (Currently Amended) The ionically crosslinked resin composition of claim 1 prepared in the

presence of a free radical initiator.

3. (Currently Amended) The <u>ionically crosslinked</u> resin composition of claim 1 in the form of a

hot melt adhesive.

4. (Currently Amended) The ionically crosslinked resin composition of claim 1 in the form of a

pressure sensitive adhesive.

5. (Currently Amended) The ionically crosslinked resin composition of claim 4 wherein the

pressure sensitive adhesive is a solvent based adhesive.

6. (Currently Amended) The <u>ionically crosslinked</u> resin composition of claim 1 wherein the

alpha, beta ethylenically unsaturated monomer is one or more (meth)acrylates.

7. (Currently Amended) The ionically crosslinked resin composition of claim 6 in the form of a

pressure sensitive adhesive wherein the unsaturated monomer is a mixture of butyl acrylate

and 2-ethyl hexyl acrylate.

8. (Cancelled)

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9. (Currently Amended) The ionically crosslinked resin composition of claim 1 wherein the metal of the metal compound is selected from the group consisting of lithium, sodium, potassium, cesium, magnesium, calcium, strontium, barium, titanium, zirconium, vanadium, chromium, molybdenum, tungsten, manganese, iron, cobalt, nickel, palladium, copper, zinc, cadmium, mercury, boron, aluminum, gallium, indium, silicon, germanium, tin, lead, antimony, and bismuth.

PATENT

- 10. (Currently Amended) The ionically crosslinked resin composition of claim 9 wherein the metal salt is zinc oxide.
- 11. (Currently Amended) The <u>ionically crosslinked</u> resin composition of claim 1 wherein the carboxylic polyacid, anhydride, sulfur oxide, or phosphorus oxide is selected from the group consisting of include phthalic acid, trimellitic anhydride, pyromellitic anhydride, 5norbornene-endo-2,3-dicarboxylic anhydride, naphthyl anhydride, naphthalene tetracarboxylic acid dianhydride, maleic anhydride, succinic anhydride, chlorendic anhydride, maleic acid, succinic acid, fumaric acid, oxalic acid, malonic acid, glutaric acid, adipic acid, dimer fatty acids, styrene/maleic anhydride polymers, and methyl hexahydrophthalic anhydride.
- 12. (Currently Amended) The ionically crosslinked resin composition of claim 1 wherein the alpha-beta ethylenically unsaturated hydroxyl compound is an ethylenically unsaturated hydroxy derivative of a polyol.
- 13. (Currently Amended) The ionically crosslinked resin composition according to claim 12, wherein the said ethylenically unsaturated hydroxy derivative of polyol is selected from the group consisting of ethylene glycol, propylene glycol, 1,3-propanediol, 1,2, 1,3 or 1,4 butanediols, 2-methyl-1,3-propane diol (MPDiol), neopentyl glycol (NPG), alkoxylated derivatives of such diols, polyether diols, and polyester diols.
- 14. (Currently Amended) The ionically crosslinked resin composition according to claim 1 wherein the said oil soluble metal salt is a zinc salt prepared by reacting methyl

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hexahydrophthalic anhydride with a polyethylene glycol acrylate of the formula $HO(C_2H_5O)_n$ OCHC=CH₂ wherein n is 6 to form a half ester, and reacting the half ester with zinc oxide.

15.	. (Cancelled).
16	. (Cancelled).
17.	. (Cancelled).
18	. (Cancelled).
19.	. (Cancelled).
20.	. (Cancelled).
21.	. (Cancelled).
22.	. (Cancelled).
23.	. (Currently Amended) The <u>ionically crosslinked resin composition process</u> of claim 17 1 wherein the metal salt is zinc oxide, the hydroxy functional compound is polyethylene glycol having 2 to 10 ethylene units, and the carboxylic polyacid, anhydride, sulfur oxide, or phosphorus oxide is methyl hexahydrophthalic anhydride.
24.	. (Cancelled).
25.	. (Cancelled).
26.	. (Currently Amended) The <u>ionically crosslinked</u> resin composition of claim 1 <u>wherein the</u>

resin composition is in the form of a putty, adhesive, or sealant.